

concludes with the statement that "the remarkable feature, however, is that a sufficient amount of drugs could be absorbed from a few drops of dilute solution to produce such dramatic effects." On the contrary, it is evidently not appreciated that the "few drops of dilute solution" do, in fact, contain a substantial dose of each drug. The volume of a single drop from an eye dropper bottle of a type in common use is about 0.06 ml so that two drops (one to each eye) of 1% cyclopentolate solution contains 1.2 mg and two drops of 0.25% hyoscine solution contains 0.3 mg. Thus under the conditions described a significant amount of each drug was potentially available for absorption into the general circulation particularly since the normal *adult* systemic dose of hyoscine hydrobromide is 0.3-0.6 mg; cyclopentolate is not normally administered systemically.

Following the application of a drug to the eye the rate and amount of it absorbed not only locally but also systemically depends upon a variety of factors including the dose employed. It is known that hallucinations can be produced by cyclopentolate<sup>1</sup> and hyoscine<sup>2</sup> and in view of the ophthalmological doses normally employed in children what seems even more remarkable is the fact that this adverse reaction is not seen more frequently, particularly when mydriatics are used in combination. These points reinforce the important comments made in your leading article on the effect of eye drops on babies' blood pressure (5 January, p. 2).—I am, etc.,

J. W. THOMPSON

University Department of Pharmacology,  
Newcastle upon Tyne

<sup>1</sup> Binkhorst, R. D., et al., *American Journal of Ophthalmology*, 1963, **55**, 1243.

<sup>2</sup> Goodman, L. S., and Gilman, A., *The Pharmacological Basis of Therapeutics*, 4th edn., p. 528. New York, Macmillan, 1970.

### Unsuspected Cytomegalic Mononucleosis

SIR,—In your leading article (2 March, p. 340) it is implied that polyneuritis is the rarest complication of acquired cytomegalovirus infection. In our experience it has been the most common one, and nine cases have already been reported from Britain.<sup>1</sup> In two of the last five cases of cytomegalovirus infection in previously healthy young adults diagnosed by us polyneuritis was probably present.

The first patient, a girl of 18, had a three-week history of sore throat, paraesthesiae, progressive weakness, headache, and joint pains. She was found to have normal sensation and co-ordination but gross weakness of the legs and absent reflexes in all four limbs. She had a raised E.S.R. with a relative lymphocytosis. One month after the onset of symptoms cytomegalovirus was isolated from the throat swab and a specimen of urine, and her serum showed a complement-fixing antibody titre to cytomegalovirus of  $> 1/160$  with specific IgA and IgM antibodies shown by immunofluorescence. Her antibody titre to Epstein-Barr virus in this specimen was  $< 1/5$  and her Paul-Bunnell titre  $< 1/20$ , though the Monosticon test with neat serum was positive. Treatment with corticotrophin for six weeks led to a slow but complete recovery after three months of convalescence.

The second patient was a woman of 28

with an illness resembling glandular fever which was most remarkable for the intensity of the headache, photophobia, and joint pains associated with marked difficulty in walking and which was followed intermittent pyrexia for some weeks and depression for several months. She also developed paraesthesiae of the hands and arms 2½ months after the onset. During the first month of her illness her complement fixation titre to cytomegalovirus rose from  $< 1/5$  to  $\geq 1/160$  and specific IgA and IgM antibodies appeared and were still detectable four months later. A year after the onset of this infection she was still suffering intermittently from photophobia and paraesthesiae in one hand. Her Paul-Bunnell test was negative.—We are, etc.,

J. O'H. TOBIN  
H. MACDONALD

Public Health Laboratory,  
Withington Hospital

L. DOYLE

Wythenshaw Hospital,  
Manchester

J. L. TAYLOR

Birch Hill Hospital,  
Rochdale

<sup>1</sup> *Quarterly Journal of Medicine*, 1971, **40**, 435.

### Metoclopramide and Cardiac Arrhythmia

SIR,—Metoclopramide is considered to be free from side effects in adults,<sup>1</sup> though extrapyramidal signs have been described in psychiatric patients to whom very high doses were administered.<sup>2</sup> Dystonic reactions such as torticollis, oculogyric crises, and trismus have also been observed in children receiving this drug.<sup>3</sup> We here report a case of multifocal supraventricular extrasystoles appearing after a single intramuscular injection of metoclopramide on two occasions.

A 55-year-old woman was admitted because of vomiting. There was no previous history of rhythm disturbances. The heart sounds, electrocardiogram, and serum electrolyte levels were normal. Metoclopramide 10 mg was injected intramuscularly; 15 minutes later the patient complained of palpitations, her pulse became irregular, and in her electrocardiogram multifocal supraventricular extrasystoles were noted. Antiarrhythmic drugs were not administered and the rhythm returned to normal after one hour. Readministration of the same dose of metoclopramide on the next day was followed by the same rhythm disturbance.

Metoclopramide does not produce adverse effects on the cardiovascular system in dogs.<sup>4</sup> To our knowledge this is the first reported case of arrhythmia due to metoclopramide in man.—We are, etc.,

M. SHAKLAI  
J. PINKHAS  
A. DE VRIES

Beilinson Medical Centre,  
Petah Tiqva, Israel

<sup>1</sup> James, W. B., and Hume, R., *Gut*, 1968, **9**, 203.

<sup>2</sup> Borenstein, P., and Bles, G., *Therapie*, 1965, **20**, 975.

<sup>3</sup> Casteels-Van Daele, M., et al., *Archives of Disease in Childhood*, 1970, **45**, 130.

<sup>4</sup> Malméjac, J., and Laville, C., *Pathologie et Biologie*, 1964, **12**, 1074.

### Temporarily Dependent Patients in General Practice

SIR,—Dr. K. B. Thomas's article (30 March, p. 625) on the declared outcome of "untreated" patients in general practice was most interesting, but seemed to me to contain some unjustified assumptions. They

include: (1) that if the general practitioner cannot diagnose a disease, physical or psychological, the patient "is not ill"; (2) that if such a patient got better without treatment, this confirms that he was not ill; and (3) that a visit to a general practitioner is equivalent to becoming dependent.

Dr. Thomas fails to take into account the fact that a decision to consult a doctor may often be a complex one and may finally be taken as a result of pressures from "lay" advisers.<sup>1,2</sup> To equate the end result of an often complex interaction with becoming temporarily dependent seems an oversimplification, at least.

A vast mass of symptoms in the community do not ever reach a doctor—no doubt if they did, Dr. Thomas would find even more patients whom he could not diagnose. Whether or not a doctor is consulted, fortunately for mankind and particularly for the medical profession most of these do get better in spite of, because of, or without treatment. And of course "getting better" is ambiguous, connoting equally "improved" or "returned to normal." And even if there was no notable change for the better after a medical consultation, many patients would be too kind to report to their doctor that he had totally failed.

Anecdotally one hears all too often the story of the patient with a serious or lethal disease whose doctor could find nothing wrong with him at first. It is useful to be reminded that this is not always due to an individual doctor's incompetence, but in fact reflects the state of the art and science of early diagnosis; and it is cheering to be reminded by Dr. Thomas that usually the results of our inabilities are shielded from us by the healing powers of nature.—I am, etc.,

JOYCE LEESON

Department of Community Medicine,  
University of Manchester

<sup>1</sup> Robinson, D., *The Process of Becoming Ill*. London, Routledge and Kegan Paul, 1971.

<sup>2</sup> Freidson, E., *Patients' Views of Medical Practice*. New York, Russell Sage Foundation, 1961.

SIR,—I think that Dr. K. B. Thomas's article (30 March, p. 625) is important because it re-emphasizes the large number of "undiagnosed" patients visiting general practice surgeries who should not, therefore, receive pharmacologically active preparations.

However, it is misleading in his discussion to say that "most of this group of patients who received no treatment other than contact with their doctor improved" when earlier it is stated that "a few received nothing at all, and most received a placebo." The conclusion that "patients are often made to feel better with no treatment other than contact with [the doctor]" cannot be drawn from these results as equally it could be said that they improved because they were given "something"—that is, the placebo.—I am, etc.,

RICHARD J. ROBERTSON

Evesham, Worcs.

### Inversion of the Appendix

SIR,—I believe that this method of "removing" the appendix was described at the end of the last century, and from time to time has gained popularity, particularly with